



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|------------------------|---------------------------------------|----------------------|--------------------------|------------------|--|
| 09/826,198 | 04/04/2001 | David H. Bessel | 08238.011 | 011 2595 | |
| 20480 7 | 590 10/05/2005 | | EXAMINER | | |
| STEVEN L. 1 | | | LAMBRECHT, CHRISTOPHER M | | |
| • | MAN & GRAVER PLLC ER FRONT PARKWAY | | ART UNIT PAPER NUMBER | | |
| SUITE 150 | | | 2611 | | |
| SOUTH JORDAN, UT 84095 | | | DATE MAILED: 10/05/2005 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | |
|--|---|--|---------------------|
| | 09/826,198 | BESSEL, DAVID | Н. |
| Office Action Summary | Examiner | Art Unit | |
| | Christopher M. Lambrecht | 2611 | |
| The MAILING DATE of this communication app | ears on the cover sheet with the c | orrespondence ad | ddress |
| Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. hely filed the mailing date of this of U.S.C. § 133). | • |
| Status | | | |
| 1) Responsive to communication(s) filed on 20 Ju | action is non-final. nce except for formal matters, pro | | e merits is |
| Disposition of Claims | | | |
| 4) ☐ Claim(s) 1-27 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-27 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or | vn from consideration. | | |
| Application Papers | | | |
| 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex | epted or b) objected to by the I drawing(s) be held in abeyance. See ion is required if the drawing(s) is ob | e 37 CFR 1.85(a). jected to. See 37 C | |
| Priority under 35 U.S.C. § 119 | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list | s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)). | on No ed in this Nationa | I Stage |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail Di 5) Notice of Informal F 6) Other: | ate | ⁻ O-152) |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 15 June 2005 have been fully considered but they are not persuasive.

In particular, as discussed below, the declarations filed under 37 CFR §1.131-2 are insufficient to antedate the Hicks reference. Accordingly, the Hicks reference shall still be applied.

Applicant's failure to traverse facts Officially noticed in the previous Office action constitutes an admission of the facts noticed.

Response to Amendment

2. The declaration filed on 20 July 2005 under 37 CFR 1.131 has been considered but is ineffective to overcome the Hicks reference.

The evidence submitted is insufficient to establish a conception of the invention prior to the effective date of the Hicks reference. While conception is the mental part of the inventive act, it must be capable of proof, such as by demonstrative evidence or by a complete disclosure to another. Conception is more than a vague idea of how to solve a problem. The requisite means themselves and their interaction must also be comprehended. See *Mergenthaler v. Scudder*, 1897 C.D. 724, 81 O.G. 1417 (D.C. Cir. 1897).

The declaration is deficient because it lacks an allegation that the invention was conceived and/or reduced to practice in the US, a NAFTA country, and/or WTO country, as required by 37 CFR 1.131(a).

In addition, The declaration is deficient because the declaration itself contains only conclusory statements as to when the invention was conceived by the inventor. The body of the declaration contains no facts or evidence supporting these statements, i.e., no proof of conception, as required by 37 CFR 1.131(b). Furthermore, the declaration fails to point out whether any facts or evidence submitted would be

Application/Control Number: 09/826,198 Page 3

Art Unit: 2611

intended to prove reduction to practice, conception and diligence to constructive reduction to practice, or conception and diligence to actual reduction to practice. There is no evidence of any kind mentioned in the body of the declaration, and as such there is neither proof of conception nor reduction to practice.

Accordingly, the declaration under 37 CFR §1.131 is insufficient.

3. The declaration under 37 CFR 1.132 filed 15 June 2005 is insufficient to overcome the rejection of claims 1-27 based upon 35 USC 102-3 in light of Hicks as set forth in the last Office action because:

The submitted evidence is primarily a background discussion related to treatment of digital and analog video signals in a conventional television receiver/set-top box. The submitted papers then conclude with several vague assertions, e.g., "the legacy analog video is always compressed," "the legacy analog video and the digital video streams are treated exactly the same," "traveling over the same data path," and finally, "other advantages may exist."

Insofar as the declaration pertains to the subject matter of claim 1, the evidence could at best possibly show conception of the invention. However, even if the evidence was sufficient to show conception of the invention, any such evidence must be incorporated and thoroughly explained in the body of a declaration under 37 CFR §1.131, not separately as a declaration under 37 CFR §1.132.

Accordingly, the declaration under 37 CFR §1.132 is insufficient.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by US 20040261112A1 of Hicks, III et al. (hereinafter "Hicks").

With regard to claim 1, Hicks discloses a television signal processing and recording system for handling both digital and analog video signals, said system comprising:

a video decoder (A/D 125, fig. 2) in an analog signal path for converting an analog signal to a digital signal (¶0047, II. 18-24);

an encoder (A/D 125, fig. 2) for compressing said digital signal output by said video decoder (¶0047, II. 18-24, converting to MPEG-2 format inherently comprises compression); and

a connection (295, fig. 2, or 95, figs. 1 & 3) for routing said compressed digital signal into a digital signal path in which said compressed digital signal is selectively either decompressed with a decoder (325, fig. 3, of set-top box 300) and output to a television set (40, fig. 3, ¶0054, II. 3-10 and ¶0050, II. 14-18) or recorded on a digital data storage device (103, fig. 2, ¶0046, II. 5-12).

As for claim 5, Hicks discloses the system of claim 1, wherein said digital data storage device is a hard disk drive (¶0040).

As for claim 6, Hicks discloses the system of claim 1, further comprising an analog tuner for outputting said analog signal to said video decoder (¶0039, where a tuner that receives an analog signal is inherently an analog tuner).

As for claim 7, Hicks discloses the system of claim 1, wherein said encoder is an MPEG2 encoder (¶0039).

As for claim 8, Hicks discloses the system of claim 1, wherein said decoder is an MPEG2 decoder (where the signal has been compressed according to MPEG2 format, ¶0039, the associated decoder, ¶0055) is inherently an MPEG2 decoder).

As for claim 10, Hicks discloses the system of claim 1, wherein said digital data storage device is incorporated in a personal video recorder (where element 100 of fig. 1/110 of fig. 2 comprises a personal video recorder).

With regard to claim 12, Hicks discloses a method of processing and recording a television signal that handles both digital and analog video signals, said method comprising:

converting an analog signal to a digital signal (¶0039); and

compressing (where converting the signal to MPEG format, ¶0039, inherently comprises compression) and decompressing (¶0055, II. 14-18) said digital signal before outputting said digital signal to a television set (40, fig. 3, ¶0054, II. 3-10).

As for claim 13, Hicks discloses the method of claim 12, further comprising, after converting said analog signal to said digital signal and after compressing said digital signal, routing said compressed digital signal from an analog signal path to a digital signal path in which said compressed digital signal is decompressed (325, fig. 3, of set-top box 300) and output to a television set (40, fig. 3, ¶0054, II. 3-10 and ¶0050, II. 14-18).

As for claim 15, Hicks discloses the method of claim 13, further comprising tuning a digital signal with a digital tuner and outputting said tuned digital signal into said digital path (¶0041).

As for claim 16, Hicks discloses the method of claim 12, further comprising, after converting said analog signal to said digital signal and after compressing said digital signal ¶0039), recording said compressed digital signal on a digital data recording device (¶0040).

With regard to claim 18, Hicks discloses a system for processing and recording a television signal that handles both digital and analog video signals, said system comprising:

means for converting an analog signal to a digital signal (¶0039);

means for compressing and decompressing said digital signal (¶0039, where converting said signal to MPEG format inherently comprises compression).

As for claim 19, Hicks discloses the system of claim 18, further comprising means for outputting said digital signal to a television set (¶0042, II. 1-14, ¶0054, II. 3-10).

As for claim 20, Hicks discloses the system of claim 18, further comprising means for recording said digital signal when said digital signal is compressed (¶0039, ¶0046).

With regard to claim 22, Hicks discloses a television signal processing and recording system for handling both digital and analog video signals, said system comprising:

a video decoder (125, fig. 2) in an analog signal path for converting an analog signal to a digital signal (¶0047, ll. 18-24);

an encoder for compressing said digital signal output by said video decoder (where converting a signal to MPEG, ¶0047, II. 18-24, inherently comprises compression); and

a decoder (325, fig. 3, of set-top box 300) for decompressing said digital signal compressed by said encoder (¶0055, II. 14-18).

Application/Control Number: 09/826,198 Page 7

Art Unit: 2611

As for claim 23, Hicks discloses the system of claim 22, further comprising a connection for outputting said digital signal to a television set (40, fig. 3) when said digital signal is decompressed (¶0054, ll. 3-10).

As for claim 24, Hicks discloses the system of claim 22, further comprising a digital data storage device (103, figs. 1 & 2) for recording said digital signal when compressed by said encoder (¶0046, II. 5-12).

As for claim 25, Hicks discloses the system of claim 22, further comprising a digital tuner (¶0041) for outputting a tuned digital signal to (via 95 of figs. 1 & 3) said decoder (325, fig. 3).

As for claim 26, Hicks discloses the system of claim 22, further comprising an analog tuner for outputting a tuned analog signal to said video decoder (¶0039, where a tuner that receives an analog signal is inherently an analog tuner).

As for claim 27, Hicks discloses the system of claim 22, wherein said digital data storage device is a hard disk drive (¶0040).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks.

With regard to claim 2, Hicks discloses the system of claim 1, but fails to disclose a demultiplexer for demultiplexing said compressed digital signal when said compressed digital signal is routed to said data path.

Examiner takes Official notice of the fact that it is well known in the art to provide a demultiplexer for demultiplexing an MPEG encoded television signal prior to decoding said signal for display, for the purpose of routing MPEG video data to video decoding hardware and MPEG audio to audio decoding hardware, such that the MPEG stream may be more efficiently decoded.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hicks to include a demultiplexer in said digital signal path for receiving and demultiplexing said compressed digital signal when said compressed digital signal is routed to said data path or a digital signal received in digital format and not sent through said video decoder, for the purpose of enabling efficient A/V decompression.

As for claim 3, Hicks discloses the system of claim 2 as set forth above, further comprising a digital tuner for outputting a tuned digital signal into said digital signal path (¶0041).

As for claim 4, Hicks discloses the system of claim 3, as set forth above, but fails to disclose said digital tuner outputs said digital signal to said multiplexer.

Examiner takes Official notice of the fact that it is well known in the art for digital broadcasts (received by said digital tuner) to employ MPEG compression, and that it is well known in the art to provide a demultiplexer for demultiplexing an MPEG encoded television signal prior to decoding said signal for display, for the purpose of routing MPEG video data to video decoding hardware and MPEG audio to audio decoding hardware, such that the MPEG stream may be more efficiently decoded.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hicks such that said digital tuner outputs said digital signal to said multiplexer, for the purpose of enabling efficient A/V decompression.

With regard to claim 14, Hicks discloses the method of claim 13, wherein said compressed digital signal (MPEG encoded) is routed to said digital signal path, but fails to disclose demultiplexing said compressed digital signal.

Examiner takes Official notice of the fact that it is well known in the art to demultiplex an MPEG encoded television signal, for the purpose of routing MPEG video data to video decoding hardware and MPEG audio to audio decoding hardware, such that the MPEG stream may be more efficiently decoded.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hicks to demultiplex said compressed digital signal when said compressed digital signal is routed to said data path, for the purpose of enabling efficient A/V decompression.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks in view of US006483986B1 to Krapf (hereinafter "Krapf").

With regard to claim 9, Hicks discloses the system of claim 1, wherein said video encoder (125, fig. 2), encoder (125, fig. 2), and connection (coupling of signal path from A/D 125 and signal line 145, fig. 2) are incorporated in a personal video recorder (where element 100 of fig. 1/110 of fig. 2 comprises a personal video recorder) and said decoder (325, fig. 3) is incorporated in a set-top box (300, ¶0055), but fails to disclose said video decoder, encoder and connection are incorporated in a set-top box.

Krapf discloses integrating the components of a personal video recorder (2, fig. 1) and a set-top box (24, fig. 1) as a single unit (col. 6, II. 28-32), for the purpose of enabling the recorder to internally tune to a selected one of a plurality of channels (col. 6, II. 31-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hicks such that said video decoder, encoder and connection are incorporated in a set-top box, as taught by Krapf, for the purpose of enabling the recorder to internally tune to a selected one of a plurality of channels.

With regard to claim 11, Hicks discloses the system of claim 1, wherein said video decoder (125, fig. 2), encoder (125, fig. 2), connection (coupling of signal path from A/D 125 and signal line 145, fig. 2) and digital data storage device (103, fig. 2) are incorporated in a personal video recorder (where element 100 of fig. 1/110 of fig. 2 comprises a personal video recorder) and said decoder is incorporated in a settop box (300, ¶0055), but fails to disclose said video decoder, encoder, connection and digital data storage device are incorporated in a single set-top unit.

Krapf discloses integrating the components of a personal video recorder (2, fig. 1) and a set-top box (24, fig. 1) as a single unit (col. 6, Il. 28-32), for the purpose of enabling the recorder to internally tune to a selected one of a plurality of channels (col. 6, Il. 31-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hicks such that said video decoder, encoder, connection and digital data storage device are incorporated in a set-top box, as taught by Krapf, for the purpose of enabling the recorder to internally tune to a selected one of a plurality of channels.

9. Claims 17 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks as applied to claims 16 and 20 above, and further in view of U.S. Patent No. 6,788,882 to Greer et al. (hereinafter "Greer").

With regard to claim 17, Hicks discloses the method of claim 16, wherein said recording is performed by a personal video recorder (where element 100 of fig. 1/110 of fig. 2 comprises a personal video recorder), but fails to disclose converting and compressing said digital signal are performed with a set-top box.

In an analogous art, Greer discloses converting and compressing said digital signal are performed with a set-top box (e.g. 250a, fig. 2, col. 7, II. 26-29, where set-top boxes correspond to set-top box cards, performing A/D conversion and compression, col. 7, II. 9-15), enabling an external set-top box to be coupled to a recorder for digital video recording (col. 7, II. 30-33).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Hicks to include converting and compressing said digital signal are performed with a set-top box, as taught by Greer, for the purpose of enabling an external set-top box to be coupled to a recorder for digital video recording.

Application/Control Number: 09/826,198 Page 12

Art Unit: 2611

Conclusion

10. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Application/Control Number: 09/826,198

Art Unit: 2611

11. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

| Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 |
|---|
| on (Date) |
| Typed or printed name of person signing this certificate: |
| Signature: |
| Registration Number: |
| Certificate of Transmission |
| I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. () on (Date) |
| Typed or printed name of person signing this certificate: |
| |
| Signature: |
| Registration Number: |

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

Application/Control Number: 09/826,198

Art Unit: 2611

Page 14

12. Any inquiry concerning this communication or earlier communications from the examiner should

be directed to Christopher M. Lambrecht whose telephone number is (571) 727-7297. The examiner can

normally be reached from 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Christopher Grant can be reached on (571) 272-7294. The fax phone number for the organization where

this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained

from either Private PAIR or Public PAIR. Status information for unpublished applications is available

through Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Christopher M Lambrecht Examiner

Art Unit 2611

cml

HAITRAN PRIMARY EXAMINER